

Hazardous Location Lighting



The
FHZLTM
Series

Class I Div 2 LED Luminaires





The **FHZL**[™] series

- Maintenance free LED luminaries
- Available in 40W LED (2 ft), 80W LED (4 ft) or 120W LED (4 ft)
- Class I, Division 2, Groups A, B, C, D
- IP66, UL 1598, UL 8750 and UL 844 ratings
- Resistant to shock and vibration
- Five mounting options: conduit, chain, surface, pole or trunnion
- Rugged construction ensures long-life and safe operation
- 100,000-Hour LED lifespan
- 5-Year warranty

Hazardous Location Classified

Class I, Division 2
Groups A, B, C and D

Class I: A hazardous location in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable, such as petroleum refineries, aircraft hangars, dry cleaning plants, utility gas plants or storage areas for liquified petroleum or natural gas, and spray finishing areas.

Division 2: Abnormal condition, where ignitable concentrations of flammable gases, vapors or liquids are not likely to exist under normal operating conditions, for example: Closed storage drums containing flammable liquids in an inside storage room would not normally allow the hazardous vapors to escape into the atmosphere. But if one of the containers is leaking, you've got an abnormal condition.

Groups A - D: The gases and vapors of Class I locations are broken into four groups by the Code: A, B, C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure, and other flammable characteristics.

- Group A - The only substance in Group A is acetylene because it is a gas with extremely high explosion pressures.
- Group B - This group includes hydrogen and other materials with similar characteristics.
- Group C & D - The most usual Class I groups. They comprise the greatest percentage of all Class I hazardous locations. Found in Group C is ethylene. Found in Group D are many of the most common flammable substances such as butane, gasoline, natural gas and propane.

UL cUL
Listed



Complies with the following standards:

- Standard for Luminaires for Use in Hazardous (Classified) Locations, UL 844
- Standard for Luminaires, UL 1598
- Light Emitting Diode (LED) Light Sources for Use in Lighting Products, UL 8750

Complies with the following standards:

- CSA C22.2 No. 137 - Electric Luminaires for Use in Hazardous Locations
- CSA C22.2 No. 250.0-13 - CSA Standard for Safety for Luminaires

IP66
Rated

No ingress of dust; complete protection against contact (dust tight)
No ingress of water projected in powerful jets from any direction

T
Ratings

Runs much cooler than equivalent incandescent and metal halide fixtures, can be used in hazardous area that has a lower ignition temperature threshold. 40w models are T4A rated, 80w & 120w models are T5 rated.

LEDs

Multi-chip, high-output, long-life LEDs

Drivers

40W - Constant Current, Class P, 100-277V, 50/60 Hz, 450mA, THD <20%, PF 97%
80W - Constant Current, Class P, 100-277V, 50/60 Hz, 900mA, THD <20%, PF 98%
80W - Constant Current, Class P, 277-480V, 50/60 Hz, 320mA, THD <20%, PF 95%
120W - Constant Current, Class P, 100-277V, 50/60 Hz, 1300mA, THD <20%, PF 98%

Lifespan

100,000-Hour LED Lifespan based on IES LM-80 results and TM-21 calculations

Maximum Ambient Temperature

65°C (149°F)

Thermal Management

Superior heat sinking with external Air-Flow fins

Housing, Hardware & Gasket

Die-cast aluminum housing, lens frame and mounting arm; stainless steel external hardware; silicone gasket

Lens/Optical

Clear tempered glass cover, 110° reflector lens, optional 20°, 30°, 60° or 80°.

Mounting

Four mounting styles: 3/4" NPT threaded conduit; optional chains, surface, pole or trunnion mount

Finish

Our environmentally friendly polyester powder coatings are formulated for high durability and long-lasting color, and contain no VOC or toxic heavy metals.

Color Stability

LED color temperature warranted not to shift more than 200K in CCT in 5 years

Color Uniformity

PacLights's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

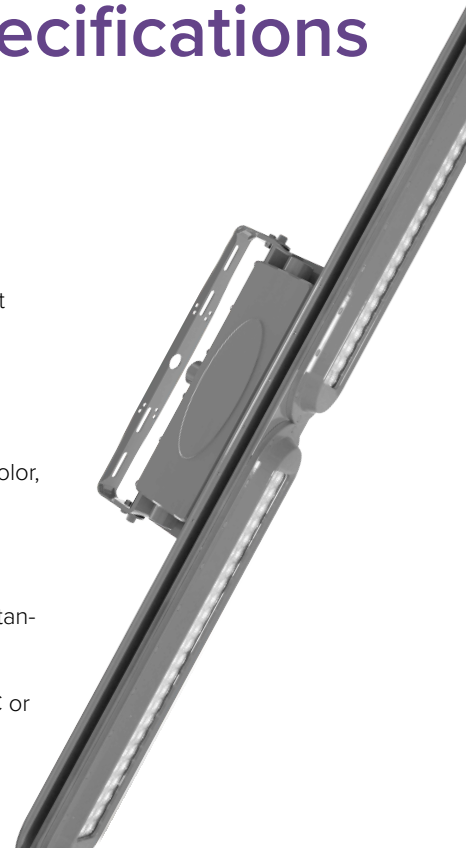
Green Technology

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

IESNA LM-79 & LM-80 Testing

PacLights LED luminaires have been tested by laboratory in accordance with IESNA LM-79 and LM-80.

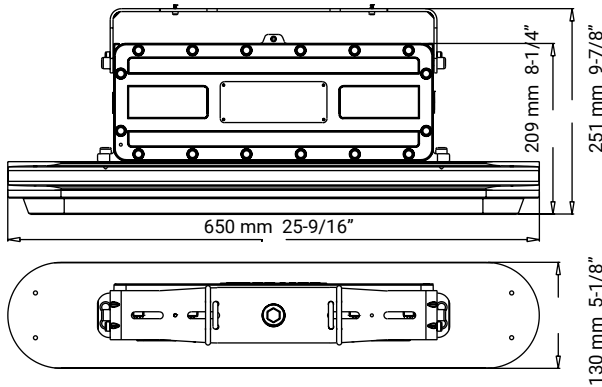
Product Specifications



Dimensions Diagram

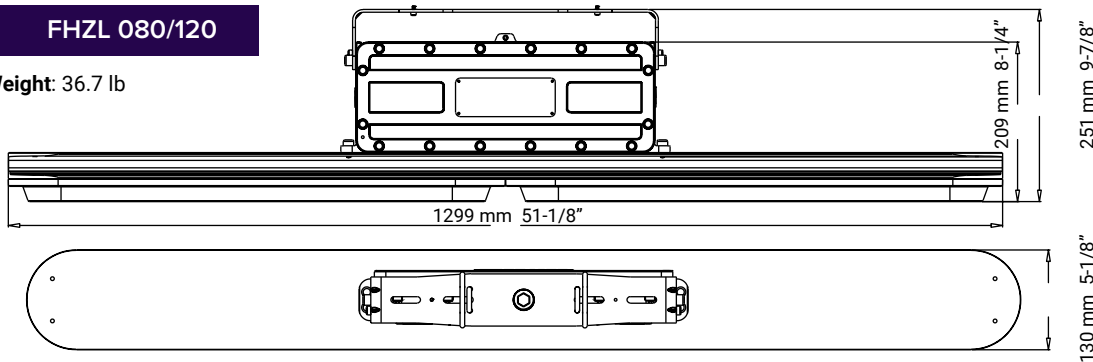
FHZL 040

Weight: 23.6 lb



FHZL 080/120

Weight: 36.7 lb



Performance Chart

| Models | 110° Lens | 60° / 80° Lens | 20° / 30° Lens |
|-----------------|-----------|----------------|----------------|
| FHZL 040 | 5,600 lm | 5,400 lm | 5,600 lm |
| FHZL 080 | 11,200 lm | 10,800 lm | 11,200 lm |
| FHZL 120 | 16,800 lm | 14,400 lm | 16,800 lm |

Ordering Matrix

| Family | Model | Color Temperature | Input Voltage | Lens Type | Housing Color | Optional Addon |
|--------|-----------------|-------------------|---------------------|-----------------|------------------|---------------------------|
| FHZL | | | | | | |
| | 040 40w | 50 5000K | UV 100-277v | 110 110° | GR Gray | WG Wire Guard |
| | 080 80w | 30° 3000K | HV* 277-480v | 20° 20° | XX* Other | CN Mounting Chains |
| | 120 120w | 40° 4000K | | 30° 30° | | PM Pole Mount |
| | | 57° 5700K | | 60° 60° | | SM Surface Mount |
| | | 65° 6500K | | 80° 80° | | TM Trunnion Mount |

HV models only available in 80w;
* Options available as special order.



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